



Niger: Maradi Rural Water Supply/ Maradi Rural Water Supply I and II

#### Ex post evaluation report on the development measure

Title as in contract	Dural Water Cumply Maradi I (EC)
Title as in contract	Rural Water Supply Maradi I (FC)
	Rural Water Supply Maradi II (FC)
	Cooperation project: Rural Water Supply Maradi (TC)
ID number	1994 66 293 (real investments FC)
	1998 66 658 (real investments FC)
	1994.2252 8-001.12 (advisory services TC)
Overall term by phase	Oct. 1995 - Dec. 1998
	Jan. 1999 - Dec. 2003
Total costs	EUR 8.13 million (FC)
	EUR 5.71 million (FC)
	EUR 5.64 million (TC)
Overall objective as in offer, with	Overall objective: Contribution to improving conditions of life
ongoing development measures, also	though a substantial reduction in health hazards to the
the current phase objective	population thanks to the permanent supply of sufficient safe
. ,	drinking water
	Programme objective: Ensuring all-year continuous supply of
	safe drinking water to the rural population in the programme
	region.
Lead executing agency	Ministry of Water Resources, Environment & Desertification
	Control (Ministère de l'Hydraulique)
Implementing organisation(s) (in	Maradi Regional Directorate for Water Resources (Direction
partner country)	Régionale de l'Hydraulique Maradi)
Target group as in offer	Rural population of Tessaoua, Mayahi and Dakoro
	Departments with the main user groups of cropland farmers,
	women, sedentary and nomadic livestock farmers
Performance rating	4
Relevance	3
Effectiveness	4
Efficiency	4
Overarching developmental	3
impacts	
Sustainability	4

# **Background**

The subject of the ex post evaluation is the completed <u>cooperation programme</u>, <u>Maradi Rural Water Supply</u> (Programme Hydraulique Villageoise dans le Département de Maradi) in Niger. The national lead executing agency for the programme was the Niger Ministry of Water Resources, Environment & Desertification Control (Ministère de l'Hydraulique), represented by the Maradi Regional Directorate of Water Resources (Direction Régionale de l'Hydraulique Maradi).

In response to the <u>core problem</u> of insufficient supply to the population of (clean) drinking water and utility water for watering small domestic animals, the main methodological element of the programme was building and strengthening local self-help capacities for the administration and maintenance of new or rehabilitated dug wells at 607 sites in the Dakoro, Mayahi and Tessauoa Departments in the Maradi region. The programme target

group was the rural population suffering from severe poverty in the selected municipalities (about 200,000 inhabitants). The programme provided methodological, sectoral and financial support.

The <u>anticipated outcomes</u> were to be achieved above all through the use of new or appropriate well construction techniques and by laying the foundation for the regulated, autonomous and sustainable operation of the wells by village communities. The programme objective was the sustainable increase in the availability of drinking water all-year-round.

The <u>impacts</u> of the programme were to be achieved through increased water supply and reduced time needed for obtaining water, which was expected to raise/intensify or secure economic activities (principally farming) and with that increase household incomes. Furthermore, the active involvement of women in the established well committees and their provision with intensive training was aimed at enhancing their social status and increasing their participation in decision-making processes in village communities.

## **Objectives**

Coherent definitions of the objectives, outputs and indicators for the components conducted by Technical and Financial Cooperation were not specified in programme preparation and no adjustment was made in the further course of implementation. A unified common programme objective was therefore defined for ex post evaluation and the objective indicators and impacts (overall objective) adjusted in hindsight.

The <u>overall objective</u> of the cooperation programme was defined as a contribution to improving conditions of life though a substantial reduction in health hazards to the population thanks to the permanent supply of sufficient safe drinking water. The new <u>programme objective</u> has therefore been specified as safeguarding the all-year continuous supply of safe drinking water to the rural population in the programme region.

The <u>indicators</u> set for verifying objective achievement in coverage index (target: 60%) and the satisfaction of basic drinking water needs (target: 15-25 l/cd) were met at a ratio of 97% and 80% respectively. The superstructure constructed is also in good and operational condition and 85% of the new and/or repaired wells were in all-year use at the time of evaluation by at least 250 people per site. The targets for hygiene at the well sites and hence compliance with Niger water quality standards, in contrast, were not met. At an actual 10%, the target of 50% women membership in user associations for the operation and maintenance of the wells was not achieved, either.

#### **Experience**

The original programme objective of guaranteeing all-year supply of safe drinking water to about 60% of the rural population in the programme region proved to be difficult to meet due to the rapid annual population growth of some 4% and the natural contamination of the open dug wells. The relevant target was not met as a consequence. The construction or repair of 607 wells in the period of implementation was offset by an increase in the target population of about 250,000 inhabitants between 1997 and 2003.

Altogether, the programme constructed adequately scaled, well-built and operational dug wells (altogether 607, of which 413 were constructed and 194 rehabilitated) as the basis for improving supply to the population in terms of quantity and quality. The quality of the execution of superstructure works, well walling and water catchments can rate as sufficient. The advisory services for village communities were efficiently organised, but the need for support in setting up well committees, in training the women in water hygiene and the subsequent introduction of an operation and maintenance scheme were considerably underestimated.

Today, 90% of the well sites are not operated in keeping with organisational, technical and hygienic requirements. The responsible self-administration capacities no longer exist or function and water withdrawal from the wells is not conducted equitably among the user groups, except in the rarest cases. The system of annual water contributions has been observed in almost none of the individual projects, so that the user committees have made too few cash provisions for servicing and maintenance.

### Relevance

The <u>relevance of the programme</u> is rated as sufficient altogether (Subrating 3). The programme objectives consist of the developmental goal of the Federal Ministry for Economic Cooperation and Development (BMZ) with the core task of eliminating extreme poverty and hunger (Millennium Development Goals, MDG 1) and promoting gender equality and empowering women (MDG 3). The supply of the population with drinking water is seen as a central issue of poverty reduction in Niger. The programme objectives are thus aligned with the Niger poverty reduction strategy (Stratégie de Développement Accéléré et de Réduction de la Pauvreté). The implementation of relevant measures is accorded priority by the responsible institutions of the partner country Niger, even though the government services still lack sufficient executive capacities.

Considering the extreme shortage of water supply facilities for the target group before programme implementation, the quantitative increase in supply already achieved and the improved water quality from the dug wells in keeping with the postulated results chain as compared with the situation at the outset, it is plausible to assume that beneficial health impacts have been achieved.

#### **Effectiveness**

Based on the target/performance comparison of objectives and indicators, the <u>effectiveness of the programme</u> is assessed overall as insufficient (<u>Subrating 4</u>), despite discernible positive results, especially in the current supply situation. The main reasons for this are that no durable self-administration capacities have been built up and the resultant operating standard is insufficient. The causes also lie in a conceptual weakness in the development measure. There was a deliberate decision not to adopt a multilevel approach with a view to building efficient capacities for well operation and the ongoing institutionalisation or dissemination of the schemes developed. For the most part, major anticipated results, such as the improvement of hygiene conditions and greater participation by women in well operation were achieved for a short time only.

# Overarching developmental impacts

Altogether, we assess the overarching developmental impacts as sufficient (Subrating 3).

The developmental objective of the programme also conforms with today's standards. The development measure contributes to the attainment of the MDGs, particularly the reduction of the poor population without sustainable access to drinking water. Relevant impacts also bear on MDG 4 (Reduce child mortality) and MDG 5 (Improve maternal health) as access to (comparatively) clean drinking water improves hygienic conditions for giving birth and in infant care. At the same time, however, the anticipated results of a durable improvement in hygiene conditions and the role of women have not materialised.

### **Efficiency**

Due to the comparatively high costs per well installation and the shortfall between results and expectations altogether, <u>programme efficiency</u> is assessed as insufficient (<u>Subrating 4</u>). Another adverse factor in assessment is the inadequate harnessing of synergies in the interaction between Technical and Financial Cooperation and the failure to develop a joint output/results-based procedure. For lack of a uniform objective definition and concerted

consultation and because the use of the instruments was not upgraded in the course of implementation, the various interventions were not properly dovetailed in technical, organisational and financial terms for harnessing synergies to achieve the objective. Nor were options considered for more economical approaches in awareness and advisory measures for the target group.

# **Sustainability**

Due to increasing deficits in the operation of the wells and the predominant lack of target group ownership at the time of evaluation, the <u>sustainability of the programme</u> is rated as insufficient (<u>Subrating 4</u>). Neither government services nor the capacities set up by the user groups indicate any readiness or efforts to improve the already generally poor operating conditions. Some of the previous counterpart contributions/reserves of the user group are not used for the intended purpose. At the same time, there are no external interventions, by the government or the donor organisations engaged in the Niger water sector, for example, and hardly any funds are provided for the durable usage of the investments. The results achieved therefore lack sustainability. Additional risk-reducing interventions have not been implemented. The supply situation can therefore be expected to deteriorate significantly again and health risks to increase.

#### Performance rating

Overall programme performance is gauged as insufficient (Rating 4). Despite the discernible beneficial outputs and results, the adverse assessments predominate. Of prime importance for evaluation is insufficient sustainability with the ascertained risks of further deterioration in operations at most sites. Besides this, it is apparent that the outcomes and hence the effectiveness of the programme are insufficient.

## **General conclusions**

- In the case of joint programme proposals, leadership and steering responsibility for designing the modules of the various implementing organisations should be clearly demarcated. Objectives, indicators and results must also be defined jointly and regularly adapted. Mechanisms and a culture of communication must be introduced. Where conflicts arise, a joint solution must be found among the stakeholder institutions.
- For future programmes with several phases, an overview of programme design must be framed before starting new phases with a view to the criteria of ex post evaluation.
- Influence on socio-cultural traditions in water supply and consumption can only be exerted through long-term advice to the target group. Operating schemes must be drafted at an early stage and tailored to local conditions. For the adequate consolidation of self-administration capacities in user associations, a follow-on phase must be scheduled for at least three years after commissioning; it would be useful here to institutionalise the follow-on phase at local level.

## **Risk assessment**

The risks of possible delays due to the assignment of local enterprises in construction as indicated in programme appraisal remained within acceptable limits. The other identified risks of unwillingness on the part of traditional authorities to cooperate with government authorities and for active cooperation in settling water user conflicts did not materialise during programme preparation and implementation. Support from the traditional authorities (maintaining the user associations, etc.), however, declined considerably during the operating phase. Nor did the risk of groundwater pollution and overuse of the wells due to a drastic expansion of livestock actually occur. There has, however, already been a severe impairment of water quality and/or pollution of well water due to improper use and maintenance of the installations and this is one reason for the programme's lack of sustainable developmental efficacy.

### **Recommendations**

Addressed to German development cooperation:

Consideration should be given to the possibility of including a follow-on phase of at least three years in the scope of services for PHV/MI if the decentralisation programmes FICOD (Fonds d'Investissement des Collectivités Décentralisées, FC) and LUCOP (Programme Nigéro-Allmand de Lutte Contre la Pauvreté, TC) are expanded into the Maradi region. In this follow-on phase, the design faults of the wells should be remedied (building walls and fixed pulling devices, etc.), the well committees reactivated and the operation and maintenance scheme adapted to the new local, municipal conditions. In the course of the LUCOP/FICOD programme, the municipalities have already received guidance and training and been supported in forming the new water user associations (Association d'Usagers d'Eau, AUE). Special importance should be attached here to conducting broad hygiene campaigns to achieve the anticipated health benefits. We recommend assigning non-governmental organisations for local implementation.

Addressed to the Ministry of Water Resources, Environment & Desertification Control (Ministère de l'Hydraulique):

- The lead executing agency and/or its regional offices must take steering and coordinating measures to restore an operational organisation at the well sites. Systematic operational responsibility should be entrusted to the new municipal capacities. We recommend assigning operational supervision to the new water user associations.
- We also recommend the systematic return of the remaining reserves to the user committees (Comités de Gestion des Points d'Eau, CGPE) for their autonomous use as their central transparent administration and joint use as planned has not been successful and funds have also been misappropriated. The new municipal capacities and/or AUEs can provide support here and/or take over monitoring.